

Health Alert: VOC Leak from Sump Pumps Force Pennsylvania Residents to Evacuate Homes



Application Note #AQ-14-826

Residents from over 150 homes in Montgomery County, PA were forced to evacuate on July 13, 2014 due to a leak of Volatile Organic Compounds (VOCs) fire officials say came from home sump pumps. The leak was detected when residents called the Skippack, PA Fire Department complaining of an intense odor coming from their basements. Upon investigation by the PA Environmental Protection Agency and Montgomery County hazardous materials experts, it was found the 70+ houses had high levels of VOCs that had the potential to cause illness or discomfort. Officials directed some residents to a local hospital to seek preventative medical attention, although no residents fell ill from gas exposure. The Red Cross set up a shelter at a local elementary school for displaced residents for the duration of the evacuation. Further tests confirmed that the VOC leak was coming from the home sump pump systems, although the reason for the leak is still under investigation.



What are Volatile Organic Compounds (VOCs)?

VOCs are any variety of organic, carbon-containing chemical compounds that release gaseous molecules from their liquid or solid form at room temperature. While many VOCs are naturally occurring and important to environmental interactions, a large number are emitted in manmade processes and are hazardous to human health if inhaled at certain concentrations. The EPA has determined that concentrations of VOCs are typically much higher indoors compared with outdoors. Health effects of these chemicals can range from temporary irritation of the eyes or throat, nausea, and headache, to long-term disease such as cancer or damage to liver, kidneys, or central nervous system. Monitoring the indoor air quality in homes and buildings helps to identify potentially harmful exposure to VOCs and other gases due to leaks.

**INHALATION
HAZARD**

Monitoring Solution: AQ EXPERT & AQ VOC Indoor Air Quality Monitors

The measurement of the concentration of VOCs commonly found in indoor environments can be performed using the E Instruments AQ EXPERT portable IAQ monitor and the AQ VOC handheld VOC monitor. These specialized monitoring instruments utilize the latest sensor technology that allow air quality analysts, environmental safety companies, laboratory technicians, etc., to quickly and accurately monitor the levels of dangerous VOCs present in the breathing environments of homes, office building, laboratories, or industrial facilities. These monitors include software with real-time continuous data logging, wireless Bluetooth compatibility, and can be customized to monitor up to 11 different parameters relevant to indoor air quality.



AQ EXPERT



AQ VOC

E Instruments International

www.E-Inst.com

P: 215-750-1212 F: 215-750-1399 A: 402 Middletown Blvd, Ste 216 Langhorne, PA 19047